IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

VERTIV GROUP CORPORATION., an Ohio corporation; and VERTIV CORPORATION, an Ohio corporation, Plaintiffs, v. SVO BUILDING ONE, LLC, a Delaware limited liability company, Defendant.	Civil Action No. **DEMAND FOR JURY TRIAL**

COMPLAINT FOR PATENT INFRINGEMENT AND MISAPPROPRIATION OF TRADE SECRETS

Plaintiffs Vertiv Group Corporation and Vertiv Corporation (formerly known as Liebert Corporation)(collectively, "Vertiv"), by and through their attorneys, bring this Complaint against defendant SVO Building One, LLC ("SVO"), and allege as follows:

NATURE OF THIS ACTION

Vertiv's history as a data center supplier

1. Data centers power the modern world as they house the equipment that is essential to the Internet and all other forms of advanced communications. For more than 50 years, Vertiv has been the leading supplier of power and thermal equipment, services and solutions for data centers, and more recently Vertiv has also designed and erected the buildings that make up a data center.

2. Vertiv has been at the forefront in developing products and technologies that make a data center function, including uninterruptable power supplies and the components of thermal management systems that keep the atmosphere inside data centers at appropriate levels

of temperature and humidity. As a result of its development work, Vertiv has created thousands of proprietary designs, methods and devices for which it has obtained hundreds of patents. For designs, methods and devices that are not protected by patents, Vertiv has treated such designs, methods and devices, as well as the know-how regarding how to design and outfit data centers it has acquired through its many years of supplying (and now building) those structures, as trade secrets.

SVO's McClellan Park data center project

3. In late 2016, SVO reached out to Vertiv, then known as Liebert, to lead the design and construction efforts on its data center project in McClellan Park (the "Project"). The Project was to consist of three two-megawatt data halls for a total capacity of six megawatts. (The data center industry measures size in terms of the amount of power a data center consumes as measured in megawatts. A six-megawatt data center is considered a fairly large data center.)

The Lump Sum Turnkey Agreement between SVO and Vertiv

4. In May 2017, Vertiv and SVO entered into a Lump Sum Turnkey Agreement (the "Agreement") pursuant to which Vertiv was contracted to design and build a data center for SVO in an existing structure and to supply the equipment – much of it Vertiv equipment – for the data center.

5. The Project was to be developed in three phases with each phase completing one of the three data halls. In recognition of the fact that this work would involve substantial numbers of Vertiv's patents, trade secrets and other intellectual property, Vertiv requested terms in the Agreement that specified (a) Vertiv would retain ownership of all Intellectual Property and Work Product (which the Agreement broadly defined) used in the Project; and (b) Vertiv would grant SVO "a limited, non-exclusive, not-transferable, *revocable* license" to use Vertiv's

Intellectual Property and Work Product solely in connection with the Project (emphasis added).

SVO's termination of the Agreement and Vertiv's revocation of the license

6. Over the course of Vertiv's work on the Project, numerous disputes arose between Vertiv and SVO regarding such things as scope of work and payment. Ultimately, SVO terminated the Agreement in July 2018 after Vertiv had substantially completed Phase 1 of the Project. Vertiv then properly revoked SVO's license pursuant to the terms of the Agreement.

7. Notwithstanding Vertiv's revocation of SVO's license, Vertiv is informed and believes that SVO has continued to access and use Vertiv's Intellectual Property by, among other things, (a) sharing Vertiv's drawings with the designers and contractors retained by SVO to work on Phases 1, 2 and 3 of the Project; (b) disclosing to other designers and contractors the equipment, systems and controls selected and configured by Vertiv for the Project; and (c) otherwise using Vertiv's trade secret work and know-how as the basis for the design and construction of Phases 2 and 3. By taking these actions, SVO exposed Vertiv's extremely valuable assets to its competitors, thus causing substantial, irreparable, harm to Vertiv.

8. Based on these improper acts, Vertiv brings this action against SVO for misappropriation of trade secrets and patent infringement.

PARTIES

9. Plaintiff Vertiv Group Corporation is a corporation organized and existing under the laws of the State of Ohio with its principal place of business at 1050 Dearborn Drive, Columbus. Ohio.

10. Plaintiff Vertiv Corporation, formerly known as Liebert Corporation, is a corporation organized and existing under the laws of the State of Ohio with its principal place of business at 1050 Dearborn Drive, Columbus. Ohio. Vertiv Corporation is a wholly-owned

subsidiary of Vertiv Group Corporation.

11. Upon information and belief, Defendant SVO is a limited liability company organized and existing under the laws of the State of Delaware with a principal place of business in California at 5170 Golden Foothill Parkway, El Dorado Hills, CA, 95762.

JURISDICTION AND VENUE

12. This lawsuit includes claims for patent infringement arising under the patents laws of the United States, 35 U.S.C. § 271 *et seq*., and seeks damages, injunctive relief and attorneys' fees under 35 U.S.C. §§ 283, 284, and 285. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338.

13. This lawsuit includes a claim for misappropriation of trade secrets arising under the Defend Trade Secrets Act, 18 U.S.C. § 1836-39, *et seq*. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1331 and 18 U.S.C. § 1836.

14. This Court has supplemental jurisdiction over the state law claims alleged in this Complaint pursuant to 28 U.S.C. § 1367.

15. This Court has personal jurisdiction over SVO because SVO is a Delaware limited liability company.

16. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b)(1) and 1400(b) because SVO resides in this district.

FACTUAL BACKGROUND

Vertiv's position as a leader in the data center industry

17. Formed more than 50 years ago in Columbus, Ohio, by Ralph Liebert, Liebert Corporation has ever since been one of the world's leading suppliers of power and thermal management equipment, services and solutions for data centers and communication networks.

For 30 years, Liebert was a wholly-owned subsidiary of Emerson Electric Co. and was part of the Emerson Network Power business. In December 2016, the Emerson Network Power entities, including Liebert, were consolidated into a new company called Vertiv Group Corporation. Liebert changed its name to Vertiv Corporation in the Summer of 2018.

18. As the use of computers became more widespread in the 1960s, Vertiv (then Liebert) recognized that there would be a growing need for equipment to cool the rooms in which computer equipment was stored because operating computers generate heat and the accumulation of heat leads to computer failures. Vertiv accordingly became the industry's first manufacturer of computer room air conditioning systems.

19. Over the years, Vertiv's product offerings evolved to serve other needs of the burgeoning data center industry, such as power supply, power protection and software. Vertiv now provides virtually any product that is needed to build and operate a data center – products for critical power, thermal management, racks and enclosures, and software to operate these products as a system. Vertiv also provides engineering services related to the design, operation, management, monitoring and maintenance of a data center. Vertiv is recognized as a worldwide leader in the data center industry.

20. Vertiv has over 20,000 employees throughout the world and has provided data center products and solutions to locations on every continent except Antarctica.

21. Vertiv also began to expand the geographical reach of its business; it now does business in countries on every continent but Antarctica.

The Agreement with SVO and Vertiv's work on the McClellan Park Project

22. Upon information and belief, SVO was created in or about 2016 for the purpose of developing a data center at McClellan Park near Sacramento, California.

23. Upon information and belief, SVO initially selected and retained DPR Construction to lead the design and construction effort on the Project. Dissatisfied, it contacted Vertiv about replacing DPR. In late 2016, SVO entered into a Letter of Intent with Vertiv, Liebert at the time, to create a data center and terminated DPR. Ultimately, in May 2017, SVO and Vertiv signed the Agreement which provided that Vertiv would design, construct and provide all equipment for the "three phase" data center Project. Section 1.4 of the Agreement provided that the Agreement would become effective when SVO satisfied certain conditions; SVO met those conditions precedent and issued a purchase order for "Phase 1" on July 27, 2017.

24. When Phase 1 was substantially done, Vertiv worked with SVO's commissioning agent to conduct commissioning tests of Phase 1 in April 2018. Once the testing was completed, SVO's agent informed Vertiv that all systems had passed, although he advised the Vertiv representatives that he was not authorized by SVO to provide Vertiv with a copy of the passing commissioning report. Several weeks later, SVO gave Vertiv a copy of a document called "commissioning report," but the document was labeled version 4 and stated, contrary to what SVO's commissioning agent had previously told Vertiv, that the tests had failed.

25. Vertiv sent SVO a notice of substantial completion later in April 2018. Despite the fact that Phase 1 has been substantially completed for months, SVO still has not issued a formal notice of completion.

26. The designs, products, systems, configurations and techniques used by Vertiv to design, construct and outfit the Project contain Vertiv's Intellectual Property, which Vertiv has protected with patents and trade secrets.

Vertiv's patents

27. Throughout its history, Vertiv has created innovative products and systems for use

in the construction, operation and management of data centers. As evidence of its role as a leader in the development of new technologies, Vertiv has received over 1,000 patents, many of which disclose inventions in the fields of power supply, thermal control and uninterruptible power sources.

28. Any number of Vertiv's patents relate to the cutting-edge products and systems provided to SVO for the Project, the following patents cover products and systems that are essential to SVO's data center:

a. U.S. Patent No. 7,352,082 entitled "Transfer Switch Device and Method" and issued on April 1, 2008;

b. U.S. Patent No. 7,459,804 entitled "Static Transfer Switch Device and Method" and issued on December 2, 2008;

c. U.S. Patent No. 9,038,404 entitled "High Efficiency Cooling System" and issued on May 26, 2015;

d. U.S. Patent No. 9,316,424 entitled "Multi-Stage Cooling System with Tandem Compressors and Optimized Control of Sensible Cooling and Dehumidification" and issued on April 19, 2016;

e. U.S. Patent No. 6,917,124 entitled "Uninterruptible Power Supply" and issued on July 12, 2005; and

f. U.S. Patent No. 6,563,048 entitled "Ancillary Cabinet System for an Uninterruptible Power Supply" and issued on May 13, 2003.

Vertiv's trade secrets

29. Although data centers share many of the same features – e.g., racks for servers, power supplies, cooling systems, fire suppressant systems, cabling, control systems and

structural systems – the way in which these various features are equipped and configured differs greatly from data center to data center, depending on environmental factors such as the size of the data halls, the shape and condition of the building that houses the data center, the weather conditions throughout the year in the data center's location and the way in which the data center will be used. No two data centers are the same.

30. As the designer of and supplier of equipment for Phase 1 of the data center, Vertiv's engineers had to make thousands of decisions regarding what equipment to specify (both in terms of each piece of equipment's function and size), where to place each piece of equipment, how to calibrate and connect each piece of equipment so that all the equipment working together would function as desired, how to control the equipment, both individually and as a whole, and how to monitor and maintain the equipment – all of which (the decision on what equipment to specify and the use of the specific equipment chosen) constitute the proprietary means and methods developed by Vertiv for designing, building and supplying a data center. These design decisions and selection processes manifested themselves in several ways: (a) in the hundreds of drawings, specifications and other design documents prepared by Vertiv; (b) in the specific components chosen and requisitioned by Vertiv; (c) in the placement and manner of connection of each component; (d) in the countless engineering calculations performed; and (e) in the numerous manuals and operating instructions created by Vertiv for the Project. These design decisions were unique to Phase 1 of the SVO Project, were maintained as confidential information by Vertiv and would be of tremendous value to someone else designing or building a data center, such as the designers and builders of Phases 2 and 3 of the SVO Project.

31. Vertiv produced three sets of drawings for Phase 1 of the Project that varied in detail and completeness – schematic drawings, design drawings and construction drawings – as

well as an entirely different kind of drawings that Vertiv submitted to equipment suppliers (including itself) as part of the requisition process. In all, Vertiv generated well over 500 drawings. The drawings are stamped as Vertiv confidential information. Vertiv's drawings were created for, and are unique to, Phase 1 of the SVO Project, were maintained as confidential information by Vertiv and would be of tremendous value to someone else designing or building a data center, such as the designers and builders of Phases 2 and 3 of the SVO Project.

32. Data centers are extraordinarily complex facilities that require the integration of many systems (power, thermal, control, etc.) in a coordinated manner so that the combined systems operate precisely, reliably and predictably. To accomplish these goals, Vertiv employees performed thousands of engineering calculations that ensured they were specifying the right components connected in the optimal configuration. Vertiv's engineering calculations, which were the results of years of experience designing data centers, created for and are unique to Phase 1 of the SVO Project, were maintained as confidential information by Vertiv and would be of tremendous value to someone else designing or building a data center, such as the designers and builders of Phases 2 and 3 of the SVO Project.

33. Although Vertiv designed and constructed Phase 1 (and was under contract to design and construct Phases 2 and 3), its primary function was to supply the equipment that goes into a data center to make it operate – components such as modular infrastructure, power supplies, thermal management and the control systems that allow the data center to operate efficiently. Vertiv has thousands of products that perform various data center functions and to the extent those products are not covered by patents, the features or operations of the products are Vertiv trade secrets. In addition, the products typically come with manuals that explain the workings of the products and what a user needs to know in order ensure the proper operation of

the products. Vertiv's manuals are also protected as trade secrets. Many aspects of the products and manuals provided for Phase 1 of the project (such as the way in which each component was calibrated and integrated into the data center) were unique to Phase 1 of the SVO Project, were maintained as confidential information by Vertiv and would be of tremendous value to someone else designing or building a data center, such as the designers and builders of Phases 2 and 3 of the SVO Project.

34. The information and inventions Vertiv protected as trade secrets are different than the information and inventions disclosed in the patents obtained by Vertiv. Vertiv's patents do not disclose its trade secrets or confidential information.

Vertiv's ownership of and license to the patented and trade secret information

35. Because of the importance it gives its Intellectual Property, Vertiv took pains in negotiating the Agreement to ensure the inclusion of provisions, including Section 8.4, that make it abundantly clear that Vertiv would own the Intellectual Property used in the design, construction and supply of equipment regarding the Project.

36. Vertiv's ownership rights extended beyond what the Agreement defined as Intellectual Property, as Vertiv also retained ownership of its "Work Product," which Section 1.2 of the Turnkey Agreement defines to include: (1) all business and technical information and know-how resulting from Vertiv's performance under the Agreement; and (2) all designs, inventions, discoveries, techniques, technologies, copyright works – including computer programs and drawings – trade secrets and other intellectual property of any kind embodied in Vertiv's work. The definition of Vertiv's ownership rights to include Work Product was not happenstance, but a deliberate effort by Vertiv to keep ownership of all that it created to the fullest extent possible.

37. At the same time, recognizing SVO's need to use Vertiv's Intellectual Property and Work Product, in Section 8.7 of the Agreement Vertiv granted SVO a limited, non-exclusive, revocable license to use its Intellectual Property and Work Product in connection with the development and operation of the Project.

38. To ensure that there could be no possible ambiguity regarding the scope of the license, Section 8.8 of the Agreement explicitly prohibits SVO from using the Work Product and Intellectual Property in any way outside the scope of the Agreement. Vertiv and SVO negotiated these terms extensively.

SVO's termination of the Agreement and Vertiv's revocation of the license

39. Almost immediately, SVO proved itself to be more than just a difficult customer. It began requesting changes to the design, yet stalled or refused to acknowledge corresponding contract modifications – i.e., change order requests. It demanded that Vertiv include features that had not been part of the agreed-upon scope of work, yet refused to pay for those features. SVO also regularly took actions which caused delays to the work Vertiv was performing. Ultimately, SVO stopped approving change order requests entirely and stopped paying Vertiv after paying Vertiv less than half of the contract amount for Phase 1 of the Project.

40. After months of non-payment by SVO, SVO, without giving proper notice as required by the Agreement, sent Vertiv a letter terminating the Agreement. Immediately upon receiving the termination letter, Vertiv stopped, and directed its contractors to stop, all ongoing work on the Project. (The dispute relating to SVO's non-payment and its termination of the Agreement is currently the subject of an arbitration proceeding in California.)

41. Faced with SVO's continued refusal to pay for work Vertiv had performed and for equipment it had supplied, Vertiv had little choice but to revoke the license to its Work

Product and Intellectual Property, which Section 8.7 of the Agreement gave it every right to do. Accordingly, on August 9, 2018, Vertiv gave SVO written notice that Vertiv was immediately terminating the license and demanding "that SVO, its contractors, subcontractors, agents, employees, officers, directors and anyone acting on its behalf, immediately cease and desist any and all use, distribution, or display of Vertiv's Work Product and Intellectual Property for any purpose." Vertiv has subsequently sent written notice to designers, contractors and vendors whom SVO brought onto the Project after terminating the Agreement that they also are prohibited from using any of Vertiv's Intellectual Property or Work Product.

SVO's continued improper disclosure and use of Vertiv's patented and trade secret information

42. Notwithstanding Vertiv's revocation of the license to SVO, SVO has continued to disclose and use Vertiv's trade secret information and patented technology. For example, Vertiv has learned that SVO has given drawings and calculations prepared by Vertiv to designers and builders of data centers, including designers and builders retained by SVO to develop Phases 2 and 3 of the Project. Upon information and belief, SVO has also shared information with designers and builders of data centers regarding the products specified and installed in Phase 1, how the various data center components have been configured and how to operate, monitor and maintain those components and the data center systems. Vertiv's allegations regarding the disclosure of its trade secrets and the use SVO has made of Vertiv's trade secrets and patented technology as alleged herein is not to be considered comprehensive or limiting in any way; discovery in this case will likely reveal other unauthorized and illegal disclosures and uses of Vertiv's intellectual property by SVO and those working on its behalf.

43. The companies to whom SVO provided Vertiv's highly valuable intellectual property are competitors of Vertiv in the business of designing, building and/or outfitting data

centers, and the delivery of such trade secret information and patented technology to those competitors has caused and will continue to cause irreparable injury to Vertiv.

FIRST CAUSE OF ACTION

(Claim for Misappropriation of Trade Secrets in Violation of Defend Trade Secrets Act, 18 U.S.C. § 1836)

44. Vertiv incorporates all of the above paragraphs as though fully set forth herein.

45. Vertiv is the owner of certain valuable trade secrets, as alleged above, relating to the design, construction and outfitting of data centers, including but not limited to drawings, technical products, manuals, engineering calculations, knowhow, and techniques. Examples of trade secrets used in the Project and disclosed to SVO include but are not limited to drawings showing the layout of the components contained in the data center; engineering calculations used to determine the size and optimal function of the components specified for the data center; and the sequence of operations of the control systems that monitor, operate and calibrate the equipment so that the data center as a whole functions as intended.

46. The trade secrets owned by Vertiv and were not disclosed in any Vertiv patents, patent applications or other publications available to the public. Likewise, Vertiv did not share the trade secrets with anyone outside of the company without the existence of a non-disclosure agreement.

47. Vertiv's trade secrets are related to Vertiv's products and services that are used or sold in interstate and foreign commerce.

48. Vetiv has at all times taken reasonable measures to keep its trade secret information secret and confidential, such as limiting who has access to its trade secrets and requiring any non-Vertiv employee who is shown such information to sign a non-disclosure

agreement.

49. Vertiv's trade secret information derives independent economic value from not being generally known to, and not being readily ascertainable through proper means by, another person who could obtain economic value from the disclosure of the information.

50. In violation of Vertiv's rights, SVO misappropriated Vertiv's trade secret information in the improper and unlawful manner as alleged herein. For example, SVO has shared drawings and engineering calculations prepared by Vertiv with other data center designers and builders.

51. As a proximate result of SVO's misappropriation of Vertiv's trade secrets, Vertiv has suffered damages in an amount to be proven at trial pursuant to 18 U.S.C § 1836(b)(3)(B).

52. SVO's trade secret misappropriation has caused and continues to cause Vertiv irreparable harm that cannot be fully redressed through damages alone. Temporary, preliminary and permanent injunctive relief is necessary to protect Vertiv's legitimate business interests. Vertiv operates in a competitive market and will continue to suffer irreparable harm absent injunctive relief pursuant to 18 U.S.C. § 1836(b)(3)(A).

53. In misappropriating Vertiv's trade secrets, SVO acted willfully and maliciously as Vertiv gave SVO written notice in August 2018 that Vertiv was revoking SVO's license to use Vertiv's intellectual property and that any further disclosure or use of that intellectual property by SVO would be unlawful. Vertiv is thus entitled to punitive and exemplary damages pursuant to 18 U.S.C. § 1836(b)(3)(C) and an award of reasonable attorneys' fees pursuant to 18 U.S.C. § 1836(b)(3)(D).

SECOND CAUSE OF ACTION

(Claim for Misappropriation of Trade Secrets under in Violation of Delaware Uniform Trade Secrets Act, 6 Del. C. §§ 2001-2009)

54. Vertiv incorporates all of the above paragraphs as though fully set forth herein.

55. Vertiv is the owner of certain valuable trade secrets, as alleged above, relating to the design, construction and outfitting of data centers, including but not limited to drawings, technical products, manuals, engineering calculations, knowhow, and techniques. Examples of trade secrets used in the Project and disclosed to SVO include but are not limited to drawings showing the layout of the components contained in the data center; engineering calculations used to determine the size and optimal function of the components specified for the data center; and the sequence of operations of the control systems that monitor, operate and calibrate the equipment so that the data center as a whole functions as intended.

56. The trade secrets are owned by Vertiv and were not disclosed in any Vertiv patents, patent applications or other publications available to the public. Likewise, Vertiv did not share the trade secrets with anyone outside of company without the existence of a non-disclosure agreement.

57. Vertiv has at all times taken reasonable measures to keep its trade secret information secret and confidential, such as limiting who has access to its trade secrets and requiring any non-Vertiv employee who is shown such information to sign a non-disclosure agreement.

58. Vertiv's trade secret information derives independent economic value from not being generally known to, and not being readily ascertainable through proper means by, another person who could obtain economic value from the disclosure of the information.

59. In violation of Vertiv's rights, SVO misappropriated Vertiv's trade secret information in the improper and unlawful manner as alleged herein. For example, SVO has shared drawings and engineering calculations prepared by Vertiv with other competing data center designers and builders.

60. As a proximate result of SVO's misappropriation of Vertiv's trade secrets, Vertiv has suffered damages in an amount to be proven at trial pursuant to 6 Del. C. § 2003(a).

61. SVO's trade secret misappropriation has caused and continues to cause Vertiv irreparable harm that cannot be fully redressed through damages alone. Temporary, preliminary and permanent injunctive relief is necessary to protect Vertiv's legitimate business interests. Vertiv operates in a competitive market and will continue to suffer irreparable harm absent injunctive relief pursuant to 6 Del. C. § 2002.

62. In misappropriating Vertiv's trade secrets, SVO acted willfully and maliciously as Vertiv gave SVO written notice in August 2018 that Vertiv was revoking SVO's license to use Vertiv's intellectual property and that any further disclosure or use of that intellectual property by SVO would be unlawful. Vertiv is thus entitled to punitive and exemplary damages pursuant to 6 Del. C. § 2003(b) and an award of reasonable attorneys' fees pursuant to 6 Del. C. § 2004.

THIRD CAUSE OF ACTION

(Claim for Infringement of Patent No. 7,352,082)

63. Vertiv incorporates all of the above paragraphs as though fully set forth herein.

64. The '082 Patent entitled "Transfer Switch Device and Method" was duly and lawfully issued on April 1, 2008. A true and correct copy of the '082 Patent is attached hereto as Exhibit A and incorporated herein by reference.

65. Vertiv is the owner of all rights, title and interest in the '082 Patent, including the

right to bring this suit for injunctive relief and damages.

66. The ‘082 Patent is valid and enforceable.

67. SVO has infringed and continues to infringe, literally or through the doctrine of equivalents, the ‘082 Patent by using in the United States without authority certain transfer switch devices.

68. Under the license granted to SVO under the Agreement, Vertiv provided SVO with a Liebert-designed, manufactured and branded STS2 Static Transfer Switch 2 for use in the Project. When Vertiv properly revoked the license in August 2018, SVO no longer had the right to use the STS2 Static Transfer Switch 2, but, upon information and belief, continues to do so.

69. SVO infringes at least claim 4 of the ‘082 Patent because that claim was drafted to incorporate the features of the STS2 Static Transfer Switch. Thus, the STS2 Static Transfer Switch being used by SVO has:

a. A first switch connectable to a voltage source;

b. A second switch connectable to a second voltage source;

c. A controller connected to the first and second switches to activate and deactivate the first and second switches to selectively connect the first or second switch to a load via a transformer;

d. The controller having inputs for receiving signals representing voltage levels of the first and second voltage sources and the voltage applied to the load transformer, wherein upon a predetermined condition, the controller:

   i. Deactivates the first switch to disconnect the first voltage source from the load;

ii. Computes in substantially real time the volt-second areas under voltage waveforms of the first and second voltage sources;

iii. Assigns a polarity to each voltage-second area based on the polarity of the corresponding voltage;

iv. Determines a switching time to minimize downstream saturation current based on the sum of the absolute values of the areas under the waveforms of the first and second voltage sources being approximately equal to the absolute value of the area under the waveform of a complete half cycle of the second voltage, and their polarities being the same; and

v. Connects the second voltage source to the load at the determined switching time.

70. As a proximate result of SVO's infringement of the '082 Patent, Vertiv has suffered damages in an amount to be proven at trial.

FOURTH CAUSE OF ACTION

(Claim for Infringement of Patent No. 7,459,804)

71. Vertiv incorporates all of the above paragraphs as though fully set forth herein.

72. The '804 Patent entitled "Static Transfer Switch Device and Method" was duly and lawfully issued on December 2, 2008. A true and correct copy of the '804 Patent is attached hereto as Exhibit B and incorporated herein by reference.

73. Vertiv is the owner of all rights, title and interest in the '804 Patent, including the right to bring this suit for injunctive relief and damages.

74. The '804 Patent is valid and enforceable.

75. SVO has infringed and continues to infringe, literally or through the doctrine of equivalents, the '804 Patent by using in the United States without authority certain static transfer switch devices.

76. Under the license granted to SVO under the Agreement, Vertiv provided SVO with a Liebert-designed, manufactured and branded STS2 Static Transfer Switch 2 for use in the Project. When Vertiv properly revoked the license in August 2018, SVO no longer had the right to use the STS2 Static Transfer Switch 2, but, upon information and belief, continues to do so.

77. SVO infringes at least claims 1, 7 and 8 of the '804 Patent because those claims were drafted to incorporate the features of the STS2 Static Transfer Switch. Thus, the STS2 Static Transfer Switch being used by SVO has, as recited in claim 7, for example:

a. A first silicon controlled rectifier connected to a voltage source;

b. A second silicon controlled rectifier connected a second voltage source; and

c. A controller connected to the first and second silicon controlled rectifiers to activate and deactivate the first and second silicon controlled rectifiers to selectively connect the first or the second silicon controlled rectifiers to a load;

d. the controller having inputs for receiving signals representing the voltage levels of the first and second voltage sources and the voltage applied to the load, wherein upon a predetermined condition, the controller temporarily pulses on the second silicon controlled rectifier and thereafter, indefinitely turns on the second silicon controlled rectifier to maintain power to the load.

78. As a proximate result of SVO's infringement of the '804 Patent, Vertiv has suffered damages in an amount to be proven at trial.

FIFTH CAUSE OF ACTION

(Claim for Infringement of Patent No. 9,038,404)

79. Vertiv incorporates all of the above paragraphs as though fully set forth herein.

80. The '404 Patent entitled "High Efficiency Cooling System" was duly and lawfully issued on May 26, 2015. A true and correct copy of the '404 Patent is attached hereto as Exhibit C and incorporated herein by reference.

81. Vertiv is the owner of all rights, title and interest in the '404 Patent, including the right to bring this suit for injunctive relief and damages.

82. The '404 Patent is valid and enforceable.

83. SVO has infringed and continues to infringe, literally or through the doctrine of equivalents, the '404 Patent by using in the United States without authority certain thermal devices.

84. Under the license granted to SVO under the Agreement, Vertiv provided SVO with a Liebert-designed, manufactured and branded DSE cooling system (e.g., DA150 and DA125) for use in the Project. When Vertiv properly revoked the license in August 2018, SVO no longer had the right to use the DSE cooling system, but, upon information and belief, continues to do so.

85. SVO infringes at least claim 1 of the '404 Patent because that claim was drafted to incorporate the features of the DSE cooling system. Thus, the DSE cooling system being used by SVO has:

a. A cabinet having an air inlet and an air outlet;

b. An air moving unit disposed in the cabinet;

c. A plurality of separate cooling stages including an upstream cooling stage and a downstream cooling stage, at least the upstream cooling stage having a variable capacity cooling circuit;

d. Each cooling stage including a cooling circuit having an evaporator, a condenser, a compressor and an expansion device;

e. At least the cooling circuit of the upstream cooling stage having a pumped refrigerant economizer mode and a direct expansion mode wherein each cooling circuit that has both the pumped refrigerant economizer mode and the direct expansion mode also has a liquid pump wherein when that cooling circuit is operated in the direct expansion mode a compressor of that cooling circuit is on and compresses a refrigerant in a vapor phase to raise the refrigerant pressure and thus the refrigerant condensing temperature and the refrigerant is circulated around the cooling circuit by the compressor of that cooling circuit and wherein when that cooling circuit is operated in the pumped refrigerant economizer mode the compressor of that cooling circuit is off and the liquid pump of that cooling circuit is on and pumps the refrigerant in a liquid phase and refrigerant is circulated around that cooling circuit by the liquid pump of that cooling circuit and without compressing the refrigerant in its vapor phase;

f. The evaporator of the cooling circuit of the upstream cooling stage and the evaporator of the cooling circuit of the downstream cooling stage arranged

in the cabinet so that air to be cooled passes over the evaporator of the cooling circuit of the upstream cooling stage and the evaporator of the cooling circuit of the downstream cooling stage in serial fashion, first over the evaporator of the cooling circuit of the upstream cooling stage and then over the evaporator of the cooling circuit of the downstream cooling stage;

g. A controller that determines which of the cooling circuits to operate to provide cooling and for each of the cooling circuits to be operated to provide cooling that has both the pumped refrigerant economizer mode and direct expansion mode, determining whether to operate each such cooling circuit in the pumped refrigerant economizer mode or the direct expansion mode;

h. The controller operating each cooling circuit having both the pumped refrigerant economizer mode and the direct expansion mode in the pumped refrigerant economizer mode when an outside air temperature is low enough to provide sufficient heat rejection from the refrigerant flowing through the condenser to the outside air without compressing the refrigerant and when the outside air temperature is not low enough to provide such sufficient heat rejection operating that cooling circuit in the direct expansion mode;

i. The controller when a Call for Cooling first reaches a point where cooling is needed, operating the upstream cooling circuit to provide cooling and not operating the downstream cooling circuit to provide cooling and when

the Call for Cooling has increased to a second point, additionally operating the downstream cooling circuit to provide cooling, wherein the cooling capacity at which the upstream cooling circuit is being operated to provide is less than the full cooling capacity of the upstream cooling circuit when the Call for Cooling reaches the second point;

j. Wherein the compressor of each cooling circuit is a tandem compressor including a fixed capacity compressor and variable capacity digital scroll compressor, the controller controlling the fixed capacity compressor and variable capacity digital scroll compressor of each of the tandem compressors based on the Call for Cooling, which of a plurality of ranges that the Call for Cooling falls within and whether the Call for Cooling is ramping up or ramping down; and

k. Wherein when there is an unmet Call for Dehumidification, the controller controls the tandem compressors based on the Call for Cooling and which of a plurality of dehumidification ranges that the Call for Cooling falls within including determining which of the variable capacity digital scroll compressors to ramp and controls the ramping of each variable capacity digital scroll compressor being ramped based on a the Call for Dehumidification and wherein control based on which of the plurality of dehumidification control ranges the Call for Cooling falls within and on the Call for Dehumidification takes precedence when there is an unmet Call for Dehumidification.

86. As a proximate result of SVO's infringement of the '404 Patent, Vertiv has

suffered damages in an amount to be proven at trial

SIXTH CAUSE OF ACTION

(Claim for Infringement of Patent No. 9,316,424)

87. Vertiv incorporates all of the above paragraphs as though fully set forth herein.

88. The '424 Patent entitled "Cooling System with Tandem Compressors and Electronic Expansion Valve Control" was duly and lawfully issued on November 11, 2014. A true and correct copy of the '424 Patent is attached hereto as Exhibit D and incorporated herein by reference.

89. Vertiv is the owner of all rights, title and interest in the '424 Patent, including the right to bring this suit for injunctive relief and damages.

90. The '424 Patent is valid and enforceable.

91. SVO has infringed and continues to infringe, literally or through the doctrine of equivalents, the '424 Patent by using in the United States without authority a certain thermal system.

92. Under the license granted to SVO under the Agreement, Vertiv provided SVO with a Liebert-designed, manufactured and branded DSE cooling system (e.g., DA150 and DA125) for use in the Project. When Vertiv properly revoked the license in August 2018, SVO no longer had the right to use the DSE cooling system, but, upon information and belief, continues to do so.

93. SVO infringes at least claim 1 of the '424 Patent because that claim was drafted to incorporate the features of the DSE cooling system. Thus, the DSE cooling system used by SVO has:

a. A cabinet having an air inlet and an air outlet;

b. An air moving unit disposed in the cabinet;

c. A plurality of separate cooling stages including an upstream cooling stage and a downstream cooling stage, the upstream cooling stage having an upstream cooling circuit and the downstream cooling stage having a downstream cooling circuit;

d. The upstream and downstream cooling circuits are each a direct expansion refrigeration cooling circuit including an evaporator, a condenser, a tandem compressor and an expansion device, the evaporator having an inlet coupled to an outlet of the expansion device and an outlet coupled to an inlet of the tandem compressor, the tandem compressor having an outlet coupled to an inlet of the condenser and the condenser having an outlet coupled to an inlet of the expansion device;

e. Each tandem compressor including a fixed capacity compressor and a variable capacity compressor;

f. The evaporator of the upstream cooling circuit and the evaporator of the downstream cooling circuit arranged in the cabinet so that air to be cooled passes over them in serial fashion, first over the evaporator of the upstream cooling circuit and then over the evaporator of the downstream cooling circuit; and

g. A controller coupled to the tandem compressors that in a sensible cooling control controls the fixed capacity compressor and variable capacity compressor of each of the tandem compressors based on a Call for Cooling, also based on which of a plurality of sensible cooling control

ranges that the Call for Cooling falls within and also based on whether the Call for Cooling is ramping up or ramping down, wherein when there is an unmet Call for Dehumidification, the controller switching from the sensible cooling control to a dehumidification control and controls the fixed capacity compressor and variable capacity compressor of each of the tandem compressors based on the Call for Dehumidification and also based on which of a plurality of dehumidification control ranges that the Call for Cooling falls within until the Call for Dehumidification has been met and then switching back to the sensible cooling control.

94. As a proximate result of SVO's infringement of the '424 Patent, Vertiv has suffered damages in an amount to be proven at trial.

SEVENTH CAUSE OF ACTION

(Claim for Infringement of Patent No. 6,917,124)

95. Vertiv incorporates all of the above paragraphs as though fully set forth herein.

96. The '124 Patent entitled "Uninterruptible Power Supply" was duly and lawfully issued on July 12, 2005. A true and correct copy of the '124 Patent is attached hereto as Exhibit E and incorporated herein by reference.

97. Vertiv is the owner of all rights, title and interest in the '124 Patent, including the right to bring this suit for injunctive relief and damages.

98. The '124 Patent is valid and enforceable.

99. SVO has infringed and continues to infringe, literally or through the doctrine of equivalents, the '124 Patent by using in the United States without authority certain uninterruptible power supplies.

100. Under the license granted to SVO under the Agreement, Vertiv provided SVO with a Liebert-designed, manufactured and branded EXL S1 UPS for use in the Project. When Vertiv properly revoked the license in August 2018, SVO no longer had the right to use the EXL S1 UPS, but, upon information and belief, continues to do so.

101. SVO infringes at least claim 1 of the '124 Patent because that claim was drafted to incorporate the features of the EXL S1 UPS. Thus, the EXL S1 UPS used by SVO has:

a. A controlled rectifier having an input coupled to receive AC power and an output coupled to a DC bus;

b. A battery coupled to the DC bus;

c. An inverter having an input coupled to the DC bus and an ouput coupled to a load; and

d. A control system coupled to the contolled rectifier and the inverter the control system comprising three microprocessors, wherein a first microprocessor functions as an overall controller, a second microprocessor controls the rectifier, and a third microprocessor controls the inverter;

e. Wherein the three microprocessors communicate via a common global memory.

102. As a proximate result of SVO's infringement of the '124 Patent, Vertiv has suffered damages in an amount to be proven at trial.

EIGHTH CAUSE OF ACTION

(Claim for Infringement of Patent No. 6,563,048)

103. Vertiv incorporates all of the above paragraphs as though fully set forth herein

104. The '048 Patent entitled "Ancillary Cabinet System for an Uninterruptible Power

Supply" was duly and lawfully issued on May 13, 2003. A true and correct copy of the '048 Patent is attached hereto as Exhibit F and incorporated herein by reference.

105. Vertiv is the owner of all rights, title and interest in the '048 Patent, including the right to bring this suit for injunctive relief and damages.

106. The '048 Patent is valid and enforceable.

107. SVO has infringed and continues to infringe, literally or through the doctrine of equivalents, the '048 Patent by using in the United States without authority certain ancillary cabinet systems for use with an uninterruptible power source.

108. Under the license granted to SVO under the Agreement, Vertiv provided SVO with a Liebert-designed, manufactured and branded PPC Second Generation Power Distribution Cabinet for use in the Project. When Vertiv properly revoked the license in August 2018, SVO no longer had the right to use the PPC Second Generation Power Distribution Cabinet, but, upon information and belief, continues to do so.

109. SVO infringes at least claims 7 and 18 of the '048 Patent because that claim was drafted to incorporate the features of the PPC Second Generation Power Distribution Cabinet. Thus, the PPC Second Generation Power Distribution Cabinet being used by SVO has:

a. At least one bay in the battery cabinet;

b. At least one guide attached to the bay;

c. A tray supported on the at least one guide; and

d. An adjustable service shelf attachable to the battery cabinet and supporting the tray when removed from the bay.

110. As a proximate result of SVO's infringement of the '048 Patent, Vertiv has suffered damages in an amount to be proven at trial

PRAYER FOR RELIEF

WHEREFORE, Vertiv prays for judgment against SVO as follows:

1. For judgement that SVO misappropriated Vertiv's trade secrets in violation of Defend Trade Secrets Act, 18 U.S.C. § 1836;

2. For judgement that SVO misappropriated Vertiv's trade secret in violation of Delaware Uniform Trade Secrets Act, 6 Del. C. §§ 2001-2009;

3. For judgement that SVO has infringed and is infringing the '082, '804, '404, '424, '124 and '048 Patents;

4. For damages according to proof;

5. For the entry of a preliminary and permanent injunction, to prevent Vertiv and its officers, directors, agents, servants, employees, attorneys, licensees, successors, assigns, contractors and customers, and those in active concert or participation with any of them, from using or disclosing any of Vertiv's trade secrets, confidential know-how or proprietary information regarding Vertiv's design, construction or outfitting of the SVO data center at McClellan Park;

6. For punitive and exemplary damages as may be provided by law;

7. For Plaintiff's attorneys' fees and costs as may be provided by law;

8. For prejudgment and post-judgment interest; and

9. For such other relief as the Court may deem just and proper.

JURY DEMAND

Vertiv respectfully requests a jury trial on all issues triable to a jury.

DATED: November 9, 2018

Respectfully submitted,

O'Rourke Law Office, LLC

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